

IN THE CLAIMS

Please amend claims 1-25 and add new claims 26-47. A copy of all of the pending claims follows with each claim including a status identifier pursuant to 37 CFR 1.121.

1. (Currently amended) ~~Method~~ A method for heating a roller used in ~~the~~ at least one of a production and/or finishing of a web of material, ~~particularly a paper web or paperboard web, characterized in that~~ comprising heating the roller (12) is heated from the outside by a heated gas (14).
2. (Currently amended) ~~Method~~ The method according to claim 1, ~~characterized in that wherein the~~ a fuel gas (14) is generated by means of at least one burner (18, 38) arranged near the a surface of the roller surface (16) for the heating of the roller.
3. (Currently amended) ~~Method~~ The method according to claim 2, ~~characterized in that wherein the~~ fuel gas (14) emerging from the at least one burner (18) acts on the surface (16) of the rotating roller for the heating of the roller.
4. (Currently amended) ~~Method~~ The method according to claim 1, ~~characterized in that wherein the~~ roller (12) is heatable on a zone basis viewed in the a direction of the a roller axis (X), with the various zones being heatable independently of each other at least in part for the heating of the roller.
5. (Currently amended) ~~Method~~ The method according to claim [[1]]2, ~~characteriz~~

- ~~ed in that~~ wherein several burners (18) are distributed over the length of the roller (12) are provided for the heating of the roller.
6. (Currently amended) ~~Method~~ The method according to claim [[1]]2, ~~characterized in that~~ wherein the at least one burner used is a catalytic burner (18) by means of which the for generating heated gas (14) is generated through combustion of a fuel (20) with one of air (22) or oxygen for the heating of the roller.
7. (Currently amended) ~~Method~~ The method according to claim [[1]]2, ~~characterized in that~~ wherein the at least one burner (18) comprises a carrier (24) with catalytic coating for the heating of the roller.
8. (Currently amended) ~~Method~~ The method according to claim 1, ~~characterized in that~~ wherein a fuel gas is used utilized as fuel (20) for the heating of the roller.
9. (Currently amended) ~~Method~~ The method according to claim [[1]]2, ~~characterized in that~~ wherein the at least one burner (18) is fed with a an in particular adjustable fuel gas/ and air mixture for the heating of the roller.
10. (Currently amended) ~~Method~~ The method according to claim 9, ~~characterized in that~~ wherein the fuel (20) and air (22) are fed to a mixing element (26) installed upstream from the at least one burner (18) for the heating of the roller.
11. (Currently amended) ~~Method~~ The method according to claim [[1]]6, ~~characterized in that~~ wherein the a supplied air (22) is distributed by means of an air distributor (28) among several burners (18) for the heating of the roller.

12. (Currently amended) ~~Method~~ The method according to claim 1, ~~characterized~~
~~—in that wherein the~~ a reaction or roller temperature is one of adjusted or controlled
by ~~means of the~~ a fuel/ and air mass flow ratio for one of adjusting or controlling
the heating of the roller.
13. (Currently amended) ~~Method~~ The method according to claim 1, ~~characterized~~
~~—in that wherein the~~ a fuel gas mass flow is controlled for one of adjusting or
controlling the heating of the roller.
14. (Currently amended) ~~Method~~ The method according to claim 1, ~~characterized~~
~~—in that wherein the~~ a fuel gas concentration in ~~the~~ air is controlled for one of
adjusting or controlling the heating of the roller.
15. (Currently amended) ~~Method~~ The method according to claim 1, ~~characterized~~
~~—in that wherein the~~ a respective control is performed on a zone basis for one of
adjusting or controlling the heating of the roller.
16. (Currently amended) ~~Method~~ The method according to claim 1, ~~characterized~~
~~—in that wherein one of~~ hydrogen or hydrogen-rich gas (~~reformat~~) is ~~used~~ utilized as
fuel for the heating of the roller.
17. (Currently amended) ~~Method~~ The method according to claim 1, ~~characterized~~
~~—in that wherein~~ natural gas is ~~used~~ utilized as fuel for the heating of the roller.
18. (Currently amended) ~~Method~~ The method according to claim 1, ~~characterized~~

~~—in that~~ wherein a respective burner (18) is arranged in an air-moving chamber (34) and ~~the~~ air flowing over the burner (18) is mixed with ~~the~~ burner waste gas for the heating of the roller.

19. (Currently amended) ~~Method~~ The method according to claim 18, ~~e-h-a-r-a-c-t-e-r-i-z-e-d~~ ~~—in that~~ wherein the air flowing over the burner (18) is mixed with the waste gas from the burner (18) by ~~means of~~ a mixing element in ~~the~~ a region of the end of the air-moving chamber (34) facing the roller for the heating of the roller.

20. (Currently amended) ~~Method~~ The method according to claim 1, ~~e-h-a-r-a-c-t-e-r-i-z-e-d~~ ~~—in that~~ wherein hot gas (40) generated by ~~means of~~ a burner (38) is mixed with supplied cold air (46) in at least one mixing element (44) in order to generate ~~the~~ heated gas (14) for acting on the roller (12) for the heating of the roller.

21. (Currently amended) ~~Method~~ The method according to claim 20, ~~e-h-a-r-a-c-t-e-r-i-z-e-d~~ ~~—in that~~ wherein the mass flow of the cold air fed to the mixing element (44) is one of adjustable or controllable for one of adjusting or controlling the heating of the roller.

22. (Currently amended) ~~Method~~ The method according to claim 20, ~~e-h-a-r-a-c-t-e-r-i-z-e-d~~ ~~—in that~~ wherein the burner (38) is fed with air (56) and fuel (54), ~~in particular fuel gas~~ for the heating of the roller.

23. (Currently amended) ~~Method~~ The method according to claim 22, ~~e-h-a-r-a-c-t-e-r-i-z-e-d~~ ~~—in that~~ wherein ~~natural gas is used as the~~ fuel gas is natural gas (54) for the heating of the roller.

24. (Currently amended) ~~Method~~ The method according to claim 20, ~~e-h-a-r-a-c-t-e-r-i-z-e-d~~
~~-in that wherein the~~ hot gas (40) generated by ~~means of~~ the burner (38) is
distributed by ~~means of~~ a gas distributor (42) among several mixing elements (44)
that are distributed over the length of the roller (12) for the heating of the roller.
25. (Currently amended) ~~Method~~ The method according to claim 24, ~~e-h-a-r-a-c-t-e-r-i-z-e-d~~
~~-in that wherein the~~ mass flows of cold air fed to the ~~various~~ several mixing
elements (44) are one of separately adjustable or controllable at least in part, for
one of adjusting or controlling the heating of the roller.
26. (New) A method for heating a roller, the method comprising:
heating a first gas in a first axial zone;
directing the first gas toward the roller to achieve a first surface
temperature;
heating a second gas in a second axial zone; and
directing the second gas toward the roller to achieve a second
surface temperature,
wherein the first axial zone and the second axial zone are located exterior to the
roller and along distinct axial locations adjacent the roller.
27. (New). The method of claim 26, wherein the first gas is produced by a fuel supplied
to a burner.
28. (New). The method of claim 26, wherein the first surface temperature is distinct
from the second surface temperature.

29. (New) The method of claim 26 further comprising:
heating a third gas in a third axial zone; and
directing the third gas toward the roller to achieve a third
surface temperature.
30. (New) The method of claim 27, wherein the burner comprises one of a catalytic
burner or a carrier having a catalytic coating.
31. (New) The method of claim 27, wherein the fuel is a fuel gas.
32. (New) The method of claim 31, wherein the fuel gas to air ratio is adjustable.
33. (New) The method of claim 32, wherein the fuel gas and air enter a mixing element
prior to entering the burner.
34. (New) The method of claim 32, wherein an air distributor supplies air for at least the
first and second axial zones.
35. (New) The method of claim 31, wherein the fuel gas has a variable mass flow rate.
36. (new) The method of claim 31, wherein the fuel gas comprises one of hydrogen or
natural gas.
37. (new) The method of claim 27, wherein the first gas comprises output from the
burner and burner waste gas.

38. (New) The method of claim 37, wherein the output from the burner is combined in a mixing element with the burner waste gas.
39. (New) The method of claim 27, wherein the first gas is mixed in a mixing element with a first air input to produce a first heat gas.
40. (New) The method of claim 39, wherein the first air input is variable.
41. (New) The method of claim 39, wherein a gas distributor directs the first heat gas through a first axial mixing element.
42. (New) The method of claim 41, wherein the first air input is variable.
43. (New) An apparatus for heating a roller, the apparatus comprising:
a first axial zone for heating a first gas;
a first exit zone defining a portion of the first axial zone;
a second axial zone for heating a second gas; and
a second exit zone defining a portion of the second axial zone,
wherein the first and second exit zones are located exterior to the roller and define distinct axial locations along the roller.
44. (New) The apparatus of claim 43 further comprising:
a first burner for producing the first gas, whereby fuel is input to the first burner.
45. (New) The apparatus of claim 43 further comprising:

an adjustable fuel to air ratio.

46. (New) The apparatus of claim 45 further comprising:
a mixing element for the fuel and air.

47. (New) The apparatus of claim 46 further comprising:
an air distributor for supplying air to the burner.